

## ABSTRACT OF THE DISCLOSURE

Techniques are provided for increasing the degree of parallelism without incurring overhead costs associated with inter-nodal communication for performing parallel operations.

One aspect of the invention is to distribute -phase partition-pairs of a parallel partition-wise

5 operation on a pair of objects among the nodes of a database system. The -phase partition-

pairs that are distributed to each node are further partitioned to form a new set of -phase

partition-pairs. One -phase partition-pair from the set of new -phase partition-pairs is

assigned to each slave process that is on a given node. In addition, a target object may be

partitioned by applying an appropriate hash function to the tuples of the target object. The

10 parallel operation is performed by broadcasting each tuple from a source table only to the

group of slave processes that is working on the static partition to which the tuple is mapped.